

Even on strictly scientific grounds, and apart from all questions of practical application, botanical readers are likely to agree that the investigations have given much more interesting results in other lines of research than in those that relate to genetics. Indeed, our author has recognized this on his own account, in the conclusion of his last chapter on heredity.

"All the characteristics mentioned in the chapter on Fluctuation have been made the subject of statistical records in the ordinary course of routine observations. Thus we possess the curves for growth, flowering, bolling, and shedding for almost every individual studied. Data for weight of lint per seed, and for ginning out-turn are also to hand, but the majority of these records are of more value as supplementary sources of information in physiology than from the standpoint of Genetics. At the same time, they are frequently of interest as showing the commercial resultant of those conflicting gametic forces whose lines we have endeavored to trace" (pp. 173-175).

O. F. COOK

## PROCEEDINGS OF THE CLUB

MARCH 26, 1913

The meeting of March 26, 1913, was held in the laboratory of the New York Botanical Garden at 3:30 P.M. Vice-President Barnhart presided. Twenty-two persons were present.

The minutes of the meeting of March 11 were approved. Dr. John H. Barnhart, chairman of the budget committee, submitted the following report which was adopted:

ESTIMATED INCOME	
Dues from members.....	\$1,000.00
Additional dues from sustaining members.....	140.00
Bulletin.....	885.00
Torrey.....	125.00
Memoirs.....	400.00
Index cards.....	200.00
Advertisements.....	50.00
Interest on invested funds.....	50.00
	\$2,850.00

## ESTIMATED EXPENDITURES

<i>Bulletin</i> .....	\$1,200.00
TORREYA.....	520.00
<i>Memoirs</i> .....	400.00
Index cards.....	150.00
Salary of the secretary and treasurer.....	300.00
Reprinting old numbers of the <i>Bulletin</i> .....	100.00
Sundries.....	75.00
	<u>\$2,745.00</u>
Estimated balance.....	105.00
	<u>\$2,850.00</u>

The resignation of Jessie P. Rose was read and accepted. Mr. W. H. Lamb, Sylviculture Division of Forest Service, Washington, D. C., Professor F. H. Blodgett, Texas Agricultural Experiment Station, College Station, Texas, and Dr. W. T. Swingle, United States Department of Agriculture, Washington, D. C., were elected to membership.

The first part of the scientific program consisted of a paper on "Some Peruvian Marine Algae" by Dr. Marshall A. Howe. This was a preliminary report on a collection of about 100 species made by Dr. Robert E. Coker, now of the U. S. Bureau of Fisheries, while employed as a fisheries expert by the Peruvian government. It was stated that, although lying wholly within the tropics, the marine flora of Peru is essentially of a "temperate" character, the large and conspicuous seaweeds being kelps of the genera *Macrocystis*, *Lessojnia*, and *Eisenia*. The absence of genera that are commonly considered peculiar to the tropics is doubtless due chiefly to the Humboldt Current, which brings northward along the western coast of South America the cold waters of the south. The temperature of the ocean waters off the coast of Peru, except for a short strip at the extreme north, has been compared by Dr. Coker to the summer temperatures of the Atlantic at New York and of the Pacific at Monterey, California. After a discussion of the earlier collections of algae made on the coast of Chili and Peru, specimens were exhibited illustrating some of the characteristic species of the region. These included several which appear to be hitherto undescribed and of which descriptions are soon to be published.

The second number on the program was entitled "Bud Varia-

tion in *Coleus*," by Dr. A. B. Stout. A discussion of the paper by Dr. Shull followed. Dr. Shull also remarked on certain bud variations which he had observed in connection with his studies in *Oenothera*.

Meeting adjourned.

B. O. DODGE,  
*Secretary*

APRIL 8, 1913

The meeting of April 8 was held at the American Museum of Natural History at 8:15 P.M. Vice-President Barnhart occupied the chair. Fifteen persons were present.

There being no business to be transacted the scientific program was in order. The announced lecture on "Some Connecticut Swamps," by Dr. George E. Nichols was postponed on account of the inability of Dr. Nichols to be present. Dr. W. A. Merrill was secured to fill the vacancy. His lecture on "Botanizing in the Region of Jalapa, Mexico," was illustrated with a large number of lantern-slides.

A brief account was given by the speaker of the journey from Veracruz to Jalapa across the low, fertile zone between the coast and the foothills and then the climb through the low, limestone hills covered with luxuriant vegetation which separate the coastal zone from the higher altitudes about Jalapa.

Jalapa is charmingly situated upon the eastern slope of Cerro Macuiltepec at the edge of a splendid primeval forest. The town is very ancient and has changed little in its general plan since Cortez passed through it on his journey to the Aztec capital. On the first promenade through Jalapa, interest will probably center in the main plaza, dominated by the old cathedral; Juarez Park, with its strange trees and flowers, its prehistoric carvings, and its splendid view of the long, narrow street leading up from the railway station; the old massive houses with projecting roofs and balconies filled with flowers and happy faces; the private gardens and orchards of oranges, bananas, cherimoyers, peaches, tree tomatoes, and cacti; the many shops filled with merchandise from far and near; and last, but not by any means least, the crowds of strange people dressed in strange

ways, speaking an unfamiliar tongue, and acting in unfamiliar ways. The streets are not only crowded with people, but with donkeys, horses, and mules, many of them bearing panniers of charcoal, fodder, ice, milk, fruits, and vegetables.

The market of Jalapa is very interesting and contains a profusion of interesting tropical products which are brought in from the surrounding country and exposed for sale in small booths, or on the ground, by native men, women, and children. Much of it is of poor quality and undersized, as though grown in sterile soil or with little cultivation. This is very noticeable in the case of coconuts, peanuts, and tomatoes, the last especially being invariably small, deeply creased, and badly flavored.

The variety and abundance of flowers, ferns, mosses, and bright-colored foliage plants in the primeval forest surrounding Jalapa is bewildering. Here are tree-ferns thirty feet in height, with wide-spreading fronds representing the very perfection of grace and beauty in leaf-structure; while hundreds of smaller ferns adorn the forest floor. Not only is the ground covered with vegetation, but every tree is a garden, where vines, bromeliads, and orchids, as well as tree-loving ferns, mosses, fungi, and lichens make their home. Jalapa has long been a favorite resort for the collector of medicinal plants and rare orchids, fungi, etc. The familiar jalap of the older doctors was a powerful cathartic derived from a vine of the morning-glory family known as *Ipomoea Jalapa*, and sarsaparilla is likewise obtained from *Smilax medica*, the Mexican relative of our common cat-brier. Vanilla is extracted from long, highly-flavored beans, which are the fruits of an orchid common about Jalapa.

Orchids, of which there are over ten thousand known species, have always attracted attention because of their fantastic shapes and colors, their peculiar mode of life, and the difficulty of collecting and cultivating them. Fifty years ago, men were scouring tropical jungles and braving fevers, wild animals, and wilder men to secure rare and unusual kinds, some of which brought fabulous prices. Since methods of growing them in conservatories have been fairly well worked out, it is not necessary to replenish them every year as formerly, and the attention of orchid lovers

has been directed to the making of valuable hybrids. Only a year or two ago a special Orchid Section was organized in the New York Horticultural Society to promote the cultivation and popularity of these wonderful plants by means of addresses, pamphlets, and public exhibitions. In the conservatories at the New York Botanical Garden the orchid houses are especially well filled, and the collection is being rapidly increased by gifts and by exploring parties sent by the garden into various parts of tropical America.

Meeting adjourned.

B. O. DODGE,  
*Secretary*

#### NEWS ITEMS

On Saturday, May 24, 1913, the ninth public meeting of the Sullivant Moss Society was held at the Brooklyn Botanic Garden and the Brooklyn Institute Museum, with the President of the Society, Prof. Alexander W. Evans, of Yale University, presiding. At the morning session, held in the museum building, colored lantern slides of mosses and hepatics were exhibited by Dr. Abel J. Grout, and papers were presented by Miss Caroline Coventry Haynes, Mr. G. K. Merrill, Miss Annie Lorenz (read by Dr. Edward B. Chamberlain), Dr. Otto E. Jennings (read by Mrs. Annie Morrill Smith), and Dr. George Hall Conklin. Photographs and autographs of bryologists were exhibited by Mrs. Smith, Vice-President of the Society, and a collection of works on Bryophyta by Miss Hutchinson, the librarian of the museum. Herbarium specimens of mosses and hepatics were also exhibited by Mr. E. L. Morris, curator of natural history. After luncheon at a local restaurant a trip was made through the Brooklyn Botanic Garden, including the first sections of the laboratory building and conservatories now nearing completion and to the local flora garden. The session closed with a visit to the hall of botany of the museum, where were exhibited wax models of fungi, and glass models of fungi and algae recently made, specially for the museum collections.

The remaining lectures for the summer course at the New York Botanical Garden on Saturday afternoons are as follows: July 5,